

Please rewrite claims 1, 5, 7, 10, 14, 16 and 19 as follows:

1 1. A translation loop modulator for a transmission circuit in a communication system, said
2 translation loop modulator comprising:
3 input modulation means for receiving at least one input signal that is representative of
4 information to be modulated, for receiving a feedback signal, and for producing an
5 intermediate modulated signal responsive to said input signal and said feedback signal;
6 comparator means for receiving said intermediate modulated signal and a
7 reference signal having a frequency of F_{LO} , and for producing an output transmission signal
8 having a frequency of F_{OUT} responsive to said intermediate modulated signal and said reference
9 signal, wherein said comparator means includes a first frequency divider unit for providing a
10 divide by m function and a second frequency divider unit for providing a divide by n function
11 such that $F_{LO} = F_{OUT} / (1 \pm m/n)$ and
12 feedback circuitry coupled to said output transmission signal, coupled to said reference
13 signal and coupled to said input modulation means, said feedback circuitry for producing said
14 feedback signal responsive to said output transmission signal and said reference signal.

1 5. A translation loop modulator as claimed in claim [4] 1, wherein [said] an input port of
2 said second frequency divider unit is coupled to said reference [unit] signal, and [said] an
3 output port of said second frequency divider unit is coupled to a phase comparator device.

1 7. A translation loop modulator as claimed in claim [6] 1, wherein [said] an input port of
2 said first frequency divider unit is coupled to said intermediate modulated signal, and [said] an
3 output port of said first frequency divider unit is coupled to a phase comparator device.

1 10. A translation loop modulator for a transmission circuit in a communication system, said
2 translation loop modulator comprising:
3 quadrature modulation means for receiving at least one input signal that is
4 representative of information to be modulated, for receiving a feedback signal, and for
5 producing an quadrature modulated signal responsive to said input signal and said feedback
6 signal;
7 phase comparator means for receiving said quadrature modulated signal and a reference
8 signal having a frequency F_{LO} , and for producing a phase comparator signal responsive to said
9 quadrature modulated signal and said reference signal, said phase comparator means including
10 a first frequency divider unit for providing a divide by m function and a second frequency
11 divider unit for providing a divide by n function;
12 oscillator means for receiving said phase comparator signal, and for producing an
13 output transmission signal responsive to said phase comparator signal, said output transmission
14 signal having a frequency F_{OUT} wherein $F_{OUT} = F_{LO} (1 \pm m/n)$; and
15 feedback circuitry coupled to said output transmission signal, coupled to said reference
16 signal and coupled to said quadrature modulation means, said feedback circuitry for producing
17 said feedback signal responsive to said output transmission signal and said reference signal.

1 14. A translation loop modulator as claimed in claim [13] 10, wherein [said] an
2 input port of said second frequency divider unit is coupled to said reference [unit]
3 signal, and [said] an output port of said second frequency divider unit is coupled to a
4 phase comparator device.

1 16. A translation loop modulator as claimed in claim [15] 10, wherein [said] an
2 input port of said first frequency divider unit is coupled to said intermediate
3 modulated signal, and [said] output port of said first frequency divider unit is coupled
4 to a phase comparator device.

1 19. A translation loop modulator for a transmission circuit in a communication
2 system, said translation loop modulator comprising:

3 quadrature modulation means for receiving at least one input signal that is
4 representative of information to be modulated, for receiving a feedback signal, and
5 for producing an quadrature modulated signal responsive to said input signal and said
6 feedback signal;

7 first frequency divider means for receiving said quadrature modulated signal,
8 and for producing a first frequency divided signal responsive to said quadrature
9 modulated signal such that said first frequency divider means provides a divide by m
10 function;

11 second frequency divider means for receiving a reference signal having a
12 frequency F_{LO} , and for producing a second frequency divided signal responsive to
13 said reference signal such that said second frequency divider means provides a divide